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| 09/757,283 | 01/08/2001 | Donald Moreaux | 10002227-1 | 7009 |

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

FOWLKES, ANDRE R

| ART UNIT | PAPER NUMBER |
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2122

DATE MAILED: 12/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/757,283

Applicant(s)

MOREAUX ET AL.

Examiner

Andre R. Fowlkes

Art Unit

2122

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 January 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-20 are pending.

Drawings

2. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Figure 4, label 610, and label 710. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "700" and "310" have both been used to designate the test case file in figure 7. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities:

- "file 310, a test data file 312, a GUI map file 420, and a test suite file 740, as shown in Fig. 6" should be "file 616, a test data file 620, a GUI map file 648, and a test suite file 614, as shown in Fig. 6" on page 12, line 4;

- "The error field 715" should be "The error field 716" on page 13, line 14;

- "the test case file 312" should be "the test case file 310" on page 14, line 6;

- "files tol be run" should be "files to be run" on page 15, line 13;

Appropriate correction is required.

Claim Objections

4. Claim 17 is objected to because of the following informalities:

- "creating a test file a plurality of test steps" should be "creating a test file comprising a plurality of test steps" on line 5

Appropriate correction is required.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Parker et al. (Parker), U.S. Patent No. 5,781,720.

As per claim 1, Parker discloses:

- **A method for automated testing of a graphical user interface (GUI) of a program, said method comprising: creating a test file comprising a plurality of**

test steps in a text format (Abstract lines 1-3, "A method for automated testing of ... computer application programs which use a Graphical User Interface", and figure 4, label 315 show the test script file (a plurality of test steps in a text format))

- **executing a test harness with said test file as input to said test harness** (figure 4 labels 315, 317, 320, and 321)

- **said test harness configured to execute one of a plurality of automated tests in response to one of a plurality of test steps** (Abstract line 8, "(the invention provides a) test executive (test harness) which executes the test script")

- **each automated test configured to test a corresponding user interface element of said program through a GUI map** (Abstract lines 9-10, "The test script is directed towards operation on logical objects", and col. 17 lines 3-5, "Mapping between ... logical object names and actual runtime GUI object names is one of the ... tasks performed by the test tool")

- **said GUI map configured to define a logical name for each user interface element of said program** (col. 17 lines 3-5, "Mapping between ... logical object names and actual runtime GUI object names is one of the ... tasks performed by the test tool").

As per claim 2, the rejection of claim 1 is incorporated and further Parker discloses that **each test step comprises an object, an action, and an identification reference** (col. 4 lines 21-26, "At the time of execution of the test script, the test executive and the test driver take the reference to the logical objects (identification reference) contained in the script and translate them into a form which allows the

Art Unit: 2122

invention to identify, manipulate and query the actual objects under test in the specific GUI”).

As per claim 3, the rejection of claim 2 is incorporated and further Parker discloses that **each test step further comprises an optional field value** (col. 27 lines 45-48, “A test script ... can read this default value (optional field value) from the database”).

As per claim 4, the rejection of claim 3 is incorporated and further Parker discloses that **each test step further comprises an error recovery value** (col. 14 lines 35-40, “Upon receiving the error report, the test executive can invoke an exception handler. The exception handler may decide either to abort further processing of the script (one possible error recovery value), or it may decide to clean up after the error and continue processing, giving control to the next script command (another possible error recovery value)”).

As per claim 5, the rejection of claim 1 is incorporated and further Parker discloses **generating said GUI map of said program by extracting a logical name, a physical name, an identification, and an ordinal value for each user interface element of said program** (col. 27 lines 12-16, “The functional specification repository (GUI map) is a database which contains information about the functional specifications of the application being tested. It includes detailed information about each window (user interface element) in the application”, and col. 27 lines 28-31, “The information contained in functional specification repository may be extracted from a resource file, the application source code, and/or the applications executable source code”, and figure

9 labels F, B, A, and D show the logical name, physical name, identification, and ordinal value, respectively).

As per claim 6, the rejection of claim 1 is incorporated and further Parker discloses **generating said GUI map of said program from one of a prototype of said program, a design document of said program and an earlier version of said program** (col. 27 lines 28-31, "The information contained in functional specification repository (GUI map) may be extracted from a resource file (prototype or design document), the (earlier version of the) application source code, and/or the applications executable source code").

As per claim 7, the rejection of claim 1 is incorporated and further Parker discloses that **each automated test is further configured to retrieve and to execute at least one of a plurality of associated reusable functions in response to said one of said plurality of test steps** (col. 7 lines 29-42, "The basic features required in the test script and test executives are: ...built-in standard functions which allow access to User Interface Driver functionality; user-defined functions and procedures with parameter passing modes of in, out, and inout; and script modules for creating a reusable library of routines").

As per claim 8, the rejection of claim 1 is incorporated and further Parker discloses **outputting results of the execution of said plurality of automated tests in response to said test file** (col. 30 lines 41-43, "When a script or group of scripts are executed, a single results file is created which stores all the information pertinent to the execution").

As per claim 9, Parker discloses **a system for automated testing of a graphical user interface (GUI) of an application, said system comprising: at least one processor** (col. 33 lines 39-41, "(The test driver ... and GUI ... both reside on a different processor"), **a memory coupled to said at least one processor, a test harness residing in said memory and executed by said at least one processor,** (col. 12 lines 54-55, "the test driver (harness) ... can ... examine these tables in memory"), **wherein said test harness is configured to execute one of a plurality of automated tests in response to one of a plurality of test steps of a data file,** (Abstract line 8, "(the invention provides a) test executive (test harness) which executes the test script (data file)"), **each automated test configured to test a corresponding user interface element of said program through a GUI map** (Abstract lines 9-10, "The test script is directed towards operation on logical objects", and col. 17 lines 3-5, "Mapping between ... logical object names and actual runtime GUI object names is one of the ... tasks performed by the test tool"), and **said GUI map configured to define a logical name for each user interface element of said program** (col. 17 lines 3-5, "Mapping between ... logical object names and actual runtime GUI object names is one of the ... tasks performed by the test tool").

As per claim 10, the rejection of claim 9 is incorporated and further claim 10 is a system claim corresponding to claim 2 and is rejected for the reasons set forth in the rejection of claim 2.

As per claim 11, the rejection of claim 10 is incorporated and further claim 11 is a system claim corresponding to claim 3 and is rejected for the reasons set forth in the rejection of claim 3.

As per claim 12, the rejection of claim 11 is incorporated and further claim 12 is a system claim corresponding to claim 4 and is rejected for the reasons set forth in the rejection of claim 4.

As per claim 13, the rejection of claim 9 is incorporated and further claim 13 is a system claim corresponding to claim 5 and is rejected for the reasons set forth in the rejection of claim 5.

As per claim 14, the rejection of claim 9 is incorporated and further claim 14 is a system claim corresponding to claim 6 and is rejected for the reasons set forth in the rejection of claim 6.

As per claim 15, the rejection of claim 9 is incorporated and further claim 15 is a system claim corresponding to claim 7 and is rejected for the reasons set forth in the rejection of claim 7.

As per claim 16, the rejection of claim 9 is incorporated and further claim 16 is a system claim corresponding to claim 8 and is rejected for the reasons set forth in the rejection of claim 8.

Claim 17 is a computer program product claim corresponding to method claim 1 and is rejected for the reasons set forth in the rejection of claim 1.

As per claim 18, the rejection of claim 17 is incorporated and further claim 18 is a computer program product claim corresponding to method claim 5 and is rejected for the reasons set forth in the rejection of claim 5.

As per claim 19, the rejection of claim 17 is incorporated and further claim 19 is a computer program product claim corresponding to method claim 8 and is rejected for the reasons set forth in the rejection of claim 8.

As per claim 20, the rejection of claim 17 is incorporated and further claim 20 is a computer program product claim corresponding to method claim 7 and is rejected for the reasons set forth in the rejection of claim 7.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre R. Fowlkes whose telephone number is (703)305-8889. The examiner can normally be reached on Monday - Friday, 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (703)305-4552. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

ARF

W. Y. Z
WEI ZHEN
Primary Examiner